

**METHOD FOR DETECTING AND TREATING TUMORS USING
LOCALIZED IMPEDANCE MEASUREMENT**

ABSTRACT OF THE DISCLOSURE

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An embodiment of the invention provides a method for detecting and treating a tumor using tissue localized volumetric impedance measurement. The method includes providing an impedance measurement apparatus having a plurality of resilient members deployable with curvature and configured to sample tissue impedance through a plurality of conductive pathways. The apparatus is configured to be coupled to at least one of an energy delivery device, a power supply, a switching device or logic resources. The apparatus is then positioned at a selected tissue site and the impedance array deployed to define a sample volume. The impedance array is then utilized to make impedance measurements through a plurality of conductive pathways. Information from the impedance measurements is then utilized to determine a tissue condition of the sample volume. Energy is then delivered from the energy delivery device to ablate or necrose at least a portion of the tumor.